

Work Order ID 106275

106275

Page 1

August-28-13 12:40:03 PM

Item ID: D3183-5

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Bearing

Start Date: 8/28/13

Start Qty: ~~50.00~~100
50

Cust Item ID:

Required Date: 8/28/13

Req'd Qty: 50.00

50

Customer:

Reference:

Approvals:

Process Plan: MLJDate: 13-08-29

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

Draw Nbr

Revision Nbr

D3183

Rev C1

100

0.00

100

Purchasing

PURCHASING

Memo

0.00

Purchasing

Issue P/O: 21142 Bearing as per Dwg D3183 Single row, deep groove. Conrad type, shielded Possible Supplier: NSK P/N 6800ZZ Certificate of conformity note is required

CZ 13/08/13 (100)

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.00

Packaging

Ensure certificate of conformity is attached

13/9/13 (100)

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

DAS
27
9-89

B9 03

100

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | | | | | | | | |
|--|---|--|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="width:15%;">Skid-tube <input type="checkbox"/></td> <td style="width:15%;">Crosstube <input type="checkbox"/></td> <td style="width:15%;">Water Jet <input type="checkbox"/></td> <td style="width:15%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Operator | | | | | | | | | |
| Material | | | | | | | | | |
| Setup | | | | | | | | | |
| Other | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| | | | |
|---|---|---|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|---|---|---|---|

Work Order ID 106275

106275

Page 2

August-28-13 12:40:03 PM

Item ID: D3183-5 Accept *N9000040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Bearing
 Start Date: 8/28/13 Start Qty: 50.00 *50* Cust Item ID:
 Required Date: 8/28/13 Req'd Qty: 50.00 *50* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

| Sequence ID/ Work Center ID | Operation Description | Set Up/ Run Hours | Tool ID | Tool # | Plan Code | Accept Qty | Reject Qty | Reject Number | Insp. Stamp |
|--------------------------------|--|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 130 | Identify as per dwg & Stock Location: <u>ST235</u> | 0.00 | | | | | | | |
| *130* | | | | | | | | | |
| Packaging | Memo | 0.00 | | | | | | | 33 13-09-04 |
| Packaging | | | | | | | | | |
| 140 | QC21- Final Inspection - Work Order Release | 0.00 | | | | | | | 13/9/10 |
| *140* | | | | | | | | | |
| QC | Memo | 0.00 | | | | | | | |
| Quality Control | | | | | | | | | |

13-09-04

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | | | | | | | | |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data | | | | | | | | | |
| Equip/Tooling | | | | | | | | | |
| Operator | | | | | | | | | |
| Material | | | | | | | | | |
| Setup | | | | | | | | | |
| Other | | | | | | | | | |
| Process | | | | | | | | | |
| Supplier | | | | | | | | | |
| Training | | | | | | | | | |
| Unapproved | | | | | | | | | |

FAULT CATEGORY

| Landing Gear | General | Other |
|---|---|--|
| <input type="checkbox"/> Bending | <input type="checkbox"/> Bend | <input type="checkbox"/> Grain |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route | <input type="checkbox"/> Hardware |
| <input type="checkbox"/> Cracks | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete |
| <input type="checkbox"/> Crushed/Crimped | <input type="checkbox"/> Burrs | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs | <input type="checkbox"/> Contamination | <input type="checkbox"/> Maintenance |
| <input type="checkbox"/> Heat Treat | <input type="checkbox"/> Countersink | <input type="checkbox"/> Mislabeled |
| <input type="checkbox"/> Inspection Strip in Tube | <input type="checkbox"/> Cut Too Short | <input type="checkbox"/> Misread |
| <input type="checkbox"/> Ripples in Bend | <input type="checkbox"/> Drill Holes | <input type="checkbox"/> Offset |
| <input type="checkbox"/> Torque Waves in Extrusion | <input type="checkbox"/> Drawing | <input type="checkbox"/> Out of Calibration |
| <input type="checkbox"/> Turning Sequence | <input type="checkbox"/> Finish | <input type="checkbox"/> Out of Sequence |
| <input type="checkbox"/> Wave/Twist in Tube | <input type="checkbox"/> Folio | <input type="checkbox"/> Outside Dimensions |
| | | <input type="checkbox"/> Ovalized |
| | | <input type="checkbox"/> Over/Under tolerance |
| | | <input type="checkbox"/> Part Incorrect |
| | | <input type="checkbox"/> Part Lost/Missing |
| | | <input type="checkbox"/> Part Moved |
| | | <input type="checkbox"/> Positioned Wrong |
| | | <input type="checkbox"/> Power Loss/Surge |
| | | <input type="checkbox"/> Pressure/Forced |
| | | <input type="checkbox"/> Temperature/Cure |
| | | <input type="checkbox"/> Weld |
| | | <input type="checkbox"/> Wrong Stock Pulled |
| | | <input type="checkbox"/> Other |

Picklist Print

Page 1

August-28-13 12:40:07 PM

Work Order ID: 106275

106275

Parent Item: D3183-5

D3183-5

Parent Item Name: Bearing

Start Date: 8/28/13

Required Date: 8/28/13

Start Qty: 50.00

Required Qty: 50.00

Comments: IPP: A03.03.27New issueKJ/RF

| Component Item ID/ Item Name | Replacement Item ID | Mfg/ Purch | Bin Item | Primary Location | Last Location | Route Seq ID | Unit of Measure | Qty on Hand | Qty per Kit | Total Qty | Qty Issued | Date Issued | Status |
|---------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|----------------|-------------|--------------|---------------|----------------|--------|
| 6800ZZ | | Purchased | No | | | 100 | Each | 0.0000 | 1 | 50 | | | |
| *680077* | | | | | | | | | ** | | | | |
| Bearing | | | | | | | | | | | | | |

10/13/13 100

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

| | | | | | | | | | | | | | | | | | | |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____ Part No. _____ NCR No. _____ | DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/> | AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | |
| Skid-tube <input type="checkbox"/> | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | | | | | | | | | | | | | | | |
| Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| Root Cause | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data <input type="checkbox"/> | | | | | | | | | |
| Equip/Tooling <input type="checkbox"/> | | | | | | | | | |
| Operator <input type="checkbox"/> | | | | | | | | | |
| Material <input type="checkbox"/> | | | | | | | | | |
| Setup <input type="checkbox"/> | | | | | | | | | |
| Other <input type="checkbox"/> | | | | | | | | | |
| Process <input type="checkbox"/> | | | | | | | | | |
| Supplier <input type="checkbox"/> | | | | | | | | | |
| Training <input type="checkbox"/> | | | | | | | | | |
| Unapproved <input type="checkbox"/> | | | | | | | | | |

FAULT CATEGORY

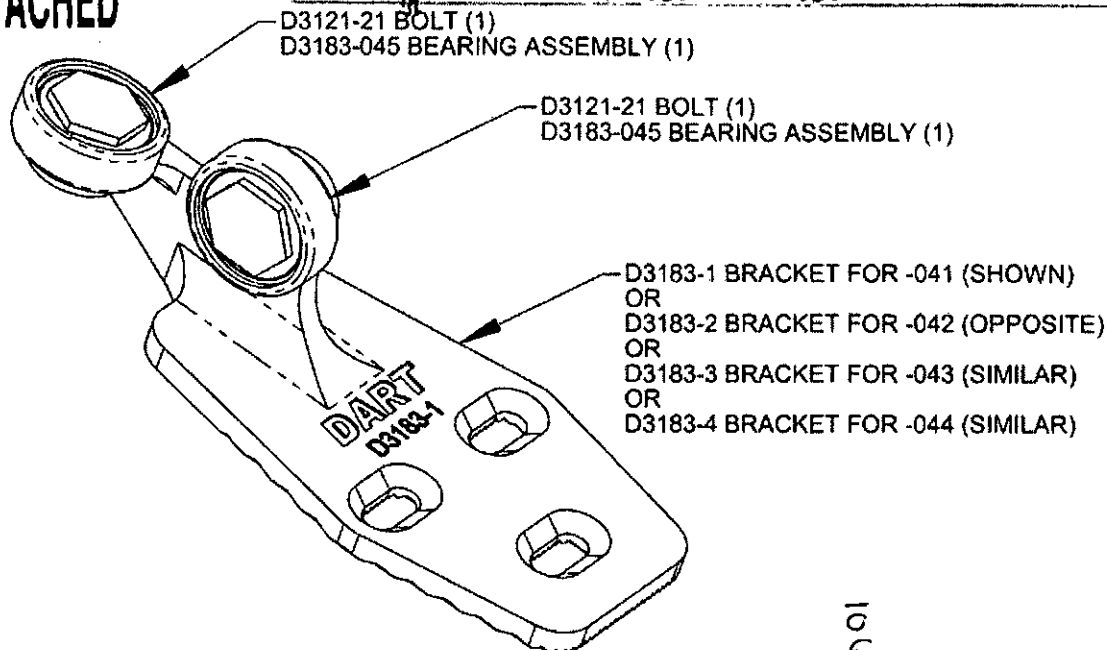
| | | |
|---|---|---|
| Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube | General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio | <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions |
|---|---|---|

| | |
|--|---|
| <input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge | <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other |
|--|---|

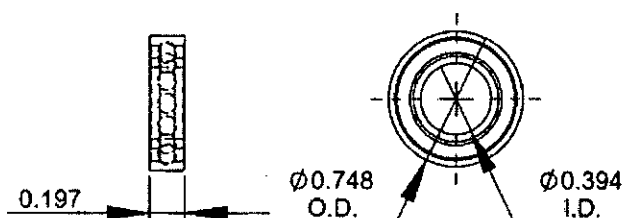
DART

| | | | |
|-------------------------|-----------------------|--|------------------------|
| DESIGN <i>#</i> | DRAWN BY <i>IP</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>#</i> | APPROVED <i>#</i> | DRAWING NO. D3183 | REV. C SHEET 1 OF 4 |
| DATE 04.02.17 | | TITLE BRACKET ASSEMBLY | SCALE 1:1 |
| A. | 03.01.24 | NEW ISSUE | |
| B | 03.06.17 | REMOVE BEARING; 1.012 WS 0.882 | |
| C | 04.02.17 | ADD -045/-9; 0.182 WAS 0.431 | |
| C1 | # 04.11.09 | 0.830 WAS 0.850 | |

RELEASED
04 03 01 *#*
DEO ATTACHED

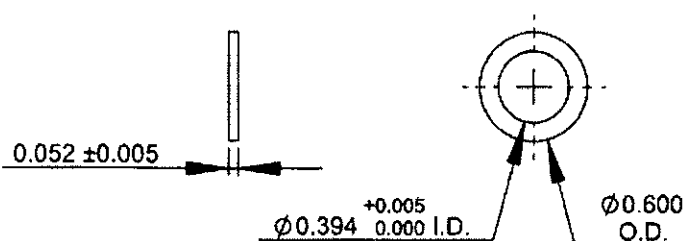


D3183-041 BRACKET ASSEMBLY (SHOWN)
D3183-042 BRACKET ASSEMBLY (OPPOSITE)
D3183-043 BRACKET ASSEMBLY (SIMILAR)
D3183-044 BRACKET ASSEMBLY (SIMILAR)



D3183-5 BEARING:
SPECIFICATION CONTROL DRAWING

- 1) SINGLE ROW, DEEP GROOVE, CONRAD TYPE, SHIELDED
- 2) POSSIBLE SUPPLIER: NSK P/N 6800ZZ
- 3) ALL DIMENSIONS ARE IN INCHES



D3183-7 WASHER

- 1) MATERIAL: AISI 303 ROUND BAR (M303R) ANNEALED
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES

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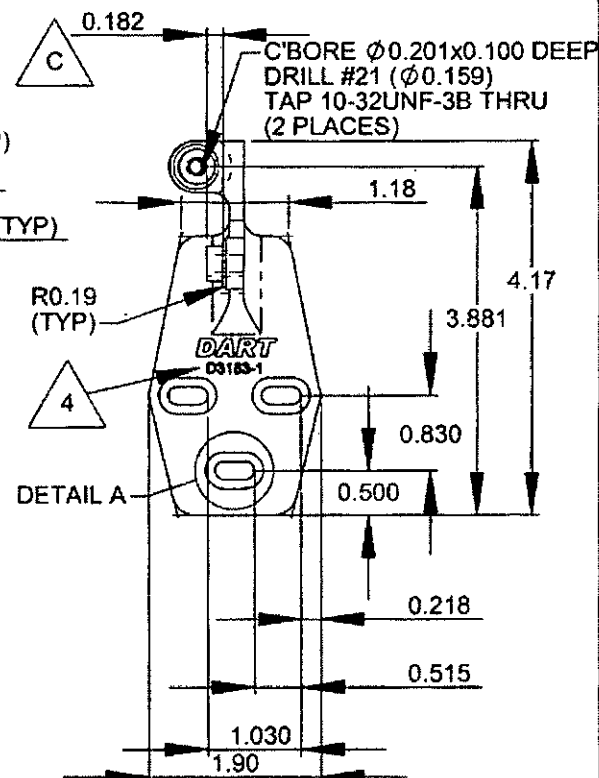
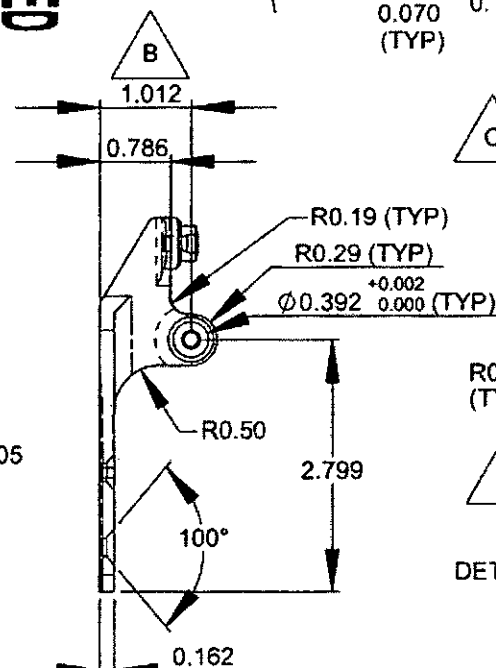
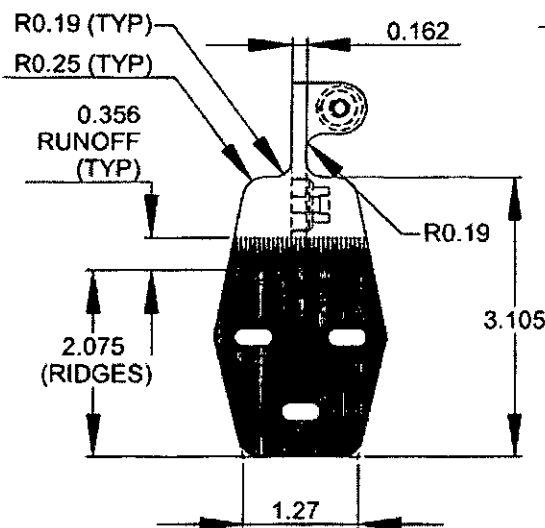
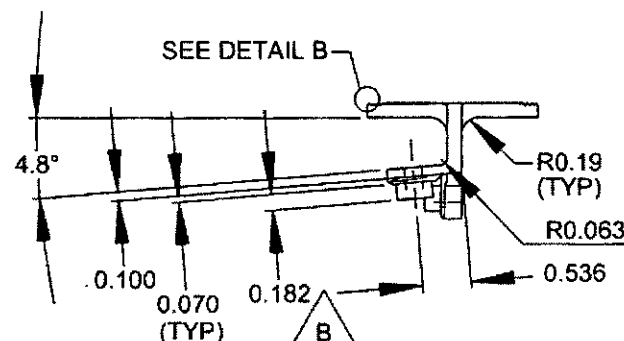
106275

DART

| | | |
|----------|------------------|-----------------------------|
| DESIGN | DRAWN BY | DART AEROSPACE LTD |
| CHECKED | APPROVED | HAWKESBURY, ONTARIO, CANADA |
| DATE | DRAWING NO. | REV. C |
| 04.02.17 | D3183 | SHEET 2 OF 4 |
| TITLE | BRACKET ASSEMBLY | SCALE |
| | | 1:2 |

RELEASED

04-03-01

DETACHED

D3183-1 BRACKET SHOWN
D3183-2 BRACKET OPPOSITE

- 1) D3183-1 CAN BE MADE FROM D3183-3
D3183-2 CAN BE MADE FROM D3183-4
- 2) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 4) ENGRAVE DART P/N & LOGO AS SHOWN
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES

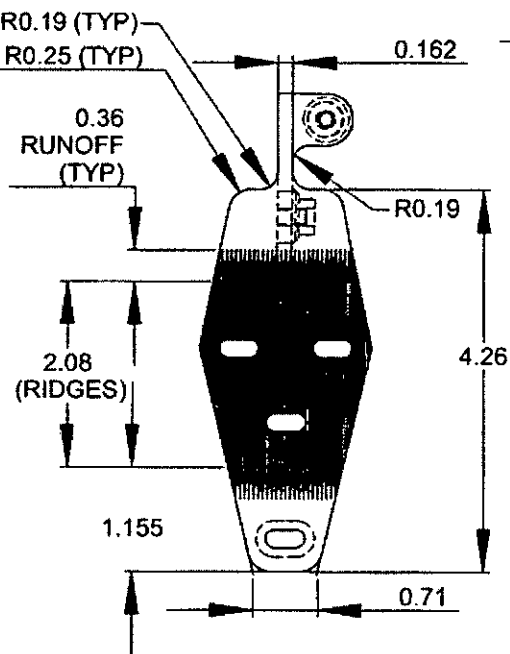
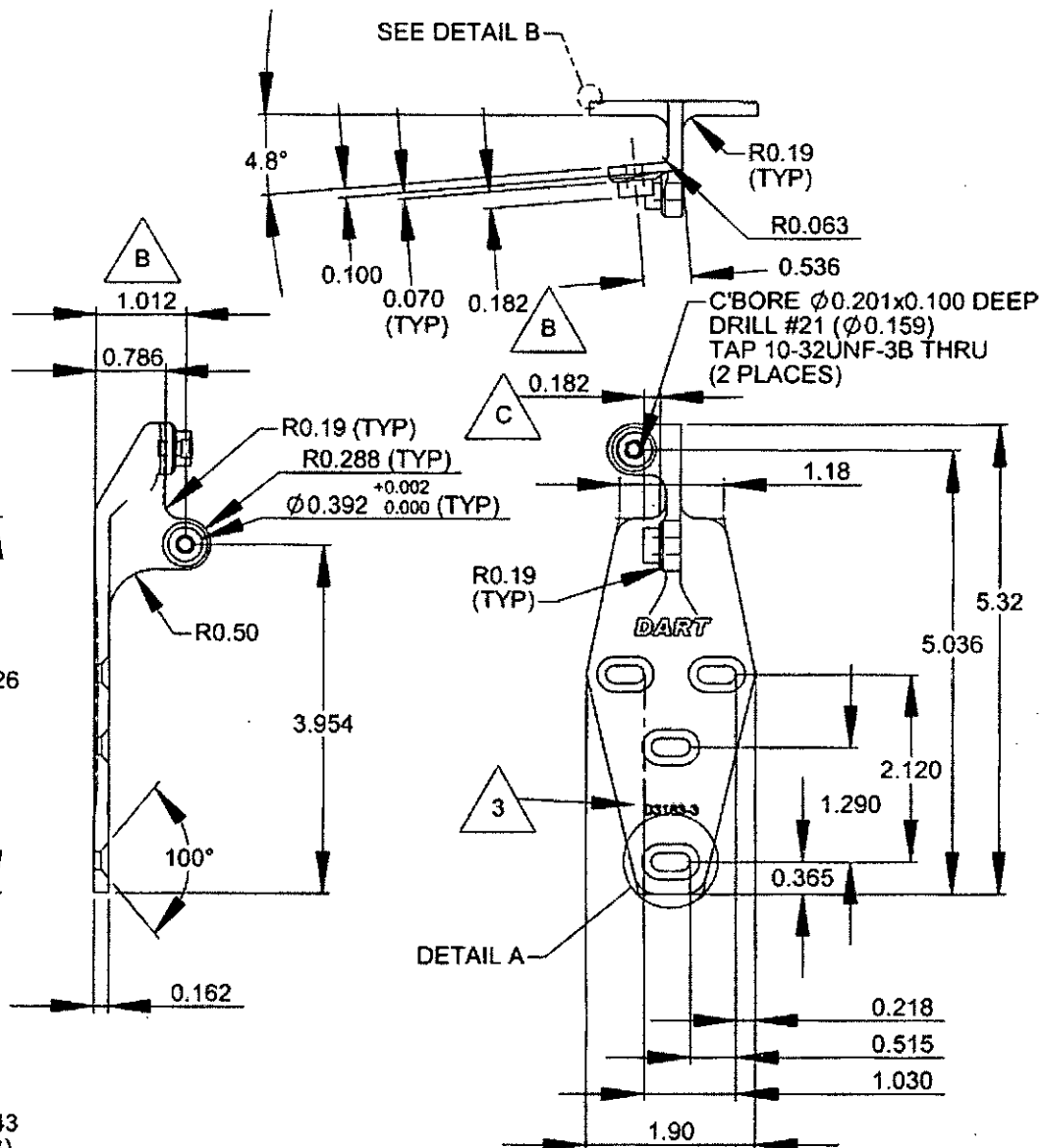
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DART



| | | |
|----------|------------------|-----------------------------|
| DESIGN | DRAWN BY | DART AEROSPACE LTD |
| CHECKED | APPROVED | HAWKESBURY, ONTARIO, CANADA |
| DATE | TITLE | REV. C |
| 04.02.17 | BRACKET ASSEMBLY | SHEET 3 OF 4 |
| | | SCALE 1:2 |



D3183-3 BRACKET SHOWN
(REPLACES BELL P/N 412-030-304-105)
D3183-4 BRACKET OPPOSITE
(REPLACES BELL P/N 412-030-304-106)

- 1) MATERIAL: 17-4 SS PER AMS 5604/5643
(REF DART SPEC. M17-4-B)
MIN ULTIMATE STRENGTH = 150 ksi
MIN YIELD STRENGTH = 100 ksi
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) ENGRAVE DART P/N & LOGO AS SHOWN
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES

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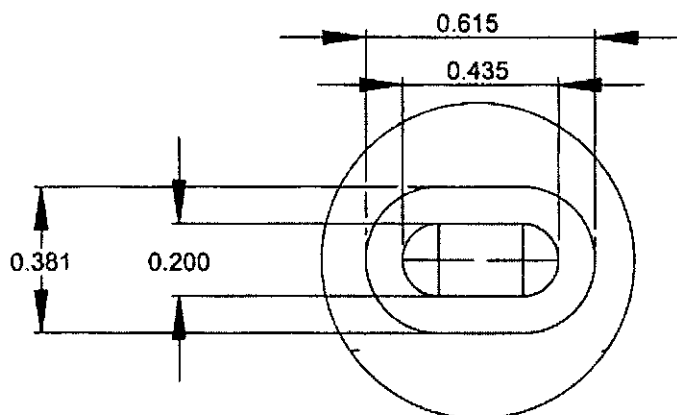
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DEO ATTACHED
RELEASED
31-03-01

106275



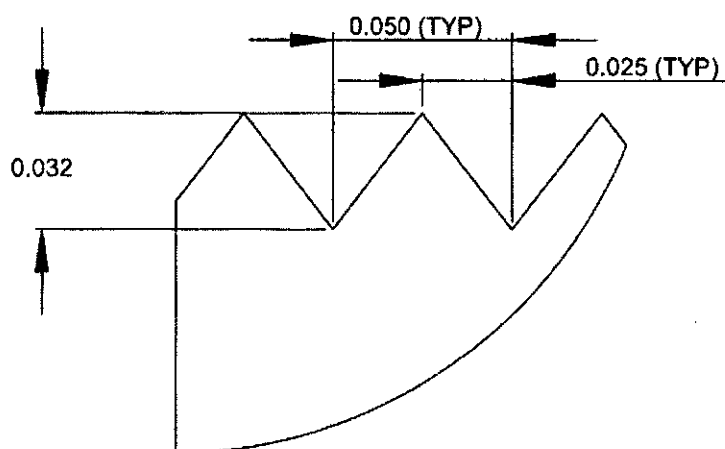
| | | | |
|----------------------------|-----------------------------|--|------------------------|
| DESIGN <i>[Signature]</i> | DRAWN BY <i>[Signature]</i> | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| CHECKED <i>[Signature]</i> | APPROVED <i>[Signature]</i> | DRAWING NO. D3183 | REV. C SHEET 4 OF 4 |
| DATE 04.02.17 | | TITLE BRACKET ASSEMBLY | SCALE 1:1 |



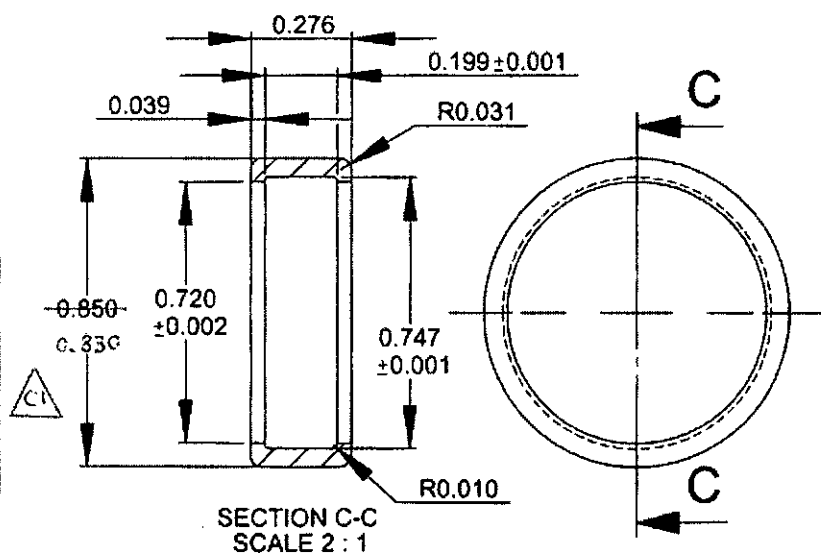
DETAIL A (2 : 1)

RELEASED
04.03.01

DEO ATTACHED



DETAIL B (20 : 1)



D3183-9 CAP

- 1) MATERIAL: DELRIN ROD, Ø1.00
(REF DART SPEC. M-DELRIN-R1.00)
- 2) TOLERANCES ARE PER DART QSI 018
UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

D3183-045 BEARING ASSEMBLY

- 1) ASSEMBLE D3183-5 BEARING AND
D3183-9 CAP

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106275

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| | | | | | | | |
|----------------------|---------------------------|-------------------------|---|--|--------------------------|---------------------------|--------------|
| DRAWING NO. D3183 | TITLE BRACKET ASSEMBLY | REV.C1 | DART AEROSPACE LTD ENGINEERING ORDER | | D.E.O. NO. D3183-C1-1 | SHEET NO. SHEET 1 OF 1 | SCALE NTS |
| DRAWN <i>Q</i> | CHECKED <i>L</i> | MFG. APPR. <i>MA</i> | APPROVED <i>MP</i> | | DE APPR. <i>MA</i> | | |
| DATE 10.05.14 | DATE 10.06.30 | DATE 10.06.30 | DATE 10/06/30 | | DATE 10/06/30 | | |

D3183-5 BEARING

ADD POSSIBLE SUPPLIER: KML P/N 6800-ZZ

BASIC LOAD RATING REQUIREMENT: Cr = 1720 N (386 lb) MIN [DYNAMIC]
Cor = 840 N (188 lb) MIN [STATIC]

REF PAR 10-012

RELEASED
2010-07-22
W

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WRITTEN PERMISSION FROM DART AEROSPACE LTD.



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO21142

Purchase Order Date 8/30/2013

PO Print Date 8/30/2013

Page Number 1 of 1

Order From :
MAIN INDUSTRIAL SALES LTD.
1475, TESSIER
HAWKESBURY, ON K6A 3S6
CA

VC-MAI001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

FASTER
8/30/2013

| | | | |
|-----------------|--------------|----------------|----------------------|
| Contact Name | | Buyer | Chantal Lavoie |
| Vendor Phone | 613 632 3595 | Customer POID | |
| | | Customer Tax # | 10127-2607 |
| Ship To Contact | | Terms | Net 30 |
| Ship To Phone | | Currency | CAD |
| Ship Via: | Yours ppd | FOB | FCA - (Free Carrier) |
| Ship Acct: | | | |

| Line Nbr | Reference Vendor Part Number Line Comments Delivery Comments | Description/ Mfg ID | Req Date/ Taxable Promise Date | CD | Req Qty/ Unit of Measure | PO Unit Price | Extended Price |
|-------------|---|------------------------|--------------------------------------|----|--------------------------------|---------------|-------------------|
| 1 | 6800ZZ AS PER DWG D3183 REV. C B106275 | Bearing | 9/3/2013 Yes 9/3/2013 | | 100.00 Each | \$1.48 | \$148.00 |
| Line Total: | | | | | | | \$148.00 |
| PO Total: | | | | | | | \$148.00 |

Note: Pricing listed above is as per contract agreement between Dart Aerospace and the respective manufacturer.
No substitution or deviation without consent.
Certificate of Conformity or Material Certification required - YES NO
PST# 6122-5207

Change Nbr: 1

Change Date: 8/30/2013

MAIN INDUSTRIAL SALES LTD.

1475 TESSIER ST.
HAWKESBURY ON K6A 3S6
Phone: (613) 632-3595 Ext. Fax: (613) 632-0262
sales@mainindustrialsales.com

Packing Slip

DATE August 30, 2013
NUMBER 0000165417
CUSTOMER NO. DART

BILL TO:

DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY ON K6A 1K7

SHIP TO:

DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY ON K6A 1K7

(613) 632-5200 Ext.

(613) 632-5200 Ext.

| P.O. NUMBER | SALESPERSON | ORDER DATE | REQ. DATE | ORDER NUMBER |
|--|-------------|-------------|-----------|-------------------------------|
| 21142 | | 30-Aug-13 | | 0000165417 |
| F.O.B. | SHIP VIA | TERMS | | |
| F.O.B. value | PICK UP | NET 30 DAYS | | |
| PART NUMBER DESCRIPTION | | LOCATION | UOM | QUANTITY REQ. SHIPPED B.O. |
| 0-68002ZKML BALL BEARING YOUR PART# : 6800ZZ | | 6D6 | EA | 100 100 |

